REMARKS

In an Office Action mailed February 23, 2010, claims 16, 18, 22, 25, 28, 29, and 31-34 were rejected. Herein, claims 16, 33, and 34 have been amended. Applicants respectfully submit that no new matter has been added. Additionally, claim 29 has been cancelled without prejudice or disclaimer to the subject matter therein. Applicants respectfully request continued examination and reconsideration of the present application based on the following.

I.   Claim Rejections under 35 U.S.C. 112

Claims 16, 18, 22, 25, and 31-34 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 16, the Examiner asserts that it is not clearly indicated what a variable priority is, i.e., it is unclear if each signal-handle processing task has a different priority or if each signal-handle processing task has a variable priority that constantly changes. Applicants note that claim 16 has been amended to indicate that the signal-handler processing task includes a variable priority that may be changed "depending on a priority of at least one signal handler registered in the queue." Applicants note that claims 33 and 34 have been amended in a manner similar to claim 16.

Regarding claim 34, the Examiner asserts that it is not clear whether claim 34 is a computer product claim or a computer functioning claim. Applicants note that claim 34 has been amended to clearly indicate that the claim is drawn to a computer readable storage medium storing a program for causing a computer to perform a task scheduling method.

In view of the above, Applicants respectfully request that claims 16, 18, 22, 25, and 31-34 have been amended to address the Examiner's concerns. Accordingly, Applicants respectfully request that the rejection of claims 16, 18, 22, 25, and 31-34 under 35 U.S.C. 112, second paragraph, be withdrawn.

II. Claim Rejections under 35 U.S.C. 103(a)

Claims 16, 18, 22, 25, 28, 29, and 31-34 were rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin et al. (US 2003/0061423, hereafter "Rankin") in view of Kling et al. (US 6,662,203, hereafter "Kling"), and further in view of Takeuchi et al. (US 5,944,778, hereafter "Takeuchi"). Claims 16, 18, 22, 25, 28, and 31-34 are pending, and claim 29 has been cancelled. Applicants respectfully request reconsideration of the above-rejection based on the following.

Claim 16 recites a priority table for recording a plurality of tasks and priorities thereof while relating them to each other, wherein the plurality of tasks includes an ordinary task and a signal-handler processing task for executing at least one signal handler, the signal-handler processing task includes a queue in which at least one signal handler to be executed is registered, the signal-handler processing task includes a variable priority to be changed depending on a priority of at least one signal handler registered in the queue, and the signal-handler processing task causes to be executed a signal handler having a highest priority out of the at least one signal handler registered in the queue upon the signal-handler processing task being called and executed. Applicants respectfully submit that this feature of claim 16 is not disclosed, suggested, or otherwise rendered obvious by any combination of Rankin, Kling, and Takeuchi.

On page 3 of the Office Action, the Examiner takes the position that the priority table, as recited by claim 16, corresponds to the task priority table disclosed by Rankin. Applicants respectfully disagree that the priority table recited in claim 16 reads on the task priority table disclosed by Rankin.

In this regard, Applicants note that Rankin discloses a task priority register ("TPR") table 202 comprising storage elements 210 including a physical identifier field 212, a logical identifier field 214, a task priority field 216, and an enable field 218 (Fig. 2 and [0026]-[0027]). The physical identifier provides an identifier for physically addressing a processor associated with the TPR table, the logical identifier provides an identifier for logically addressing the processor associated with the TPR table, the task priority value provides an indication of a priority level associated with a task being processing by the processor associated with the TPR table, and the

enable field provides an indication as to whether the processor associated with the TPR table is enabled for servicing interrupts.

In other words, the TPR table according to Rankin merely functions as a queue for ordinary tasks stored therein.

In contrast to Rankin, claim 16 discloses a priority table including a both an ordinary task and a signal-handler processing task in which the signal-handler processing task is a task for executing a signal handler and is provided separately from an ordinary task. This configuration results in a signal handler in the queue to be executed depending on the priority of the signal-handler processing task.

In particular, claim 16 recites a priority table for recording a plurality of tasks and priorities thereof while relating them to each other, wherein the plurality of tasks includes an ordinary task and a signal-handler processing task for executing at least one signal handler, the signal-handler processing task includes a queue in which at least one signal handler to be executed is registered, the signal-handler processing task includes a variable priority to be changed depending on a priority of at least one signal handler registered in the queue, and the signal-handler processing task causes to be executed a signal handler having a highest priority out of the at least one signal handler registered in the queue upon the signal-handler processing task being called and executed.

On page 11 of the Office Action the Examiner states that "Kling clearly states in the abstract that the signals and processes in this multiprocessing system are scheduled in order of their priority and it stores them in a queue. This implies that these signal handlers and process [sic] are in fact executed when having the highest priority." However, Applicants respectfully submit that Kling does not provide any disclosure that "the signals and processes" according to Kling correspond to the signal-handler processing task according to claim 16. As such, Applicants respectfully submit that Kling fails to disclose the priority table as recited by claim 16.

Takeuchi is directed to a scheduling method of a periodic process for a computer system (Abstract). In particular, Takeuchi discloses that a process group 103 is formed having at least one periodic process in which each of the periodic processes within the process group 103 process the same continuous media data, and that each of the periodic processes within the process group 103 are given a predetermined processing order (Col. 4, Lines 51-67). A periodic process first in the processing order is driven preferentially by a change of priority conducted by the periodic kernel process 101. The periodic process first in the processing order reads continuous media data supplied from an input device 105 via an input buffer 106, and works on the media data. The worked media data is then delivered to a periodic process next in the processing order via a shared buffer 110. The priority of the periodic process is inherited one after the other until the periodic process last in the processing order outputs data to an output device via an output buffer, and subsequently lowers the priority of its own process, thereby terminating a processing of one period of the process group 103.

In other words, Takeuchi merely discloses that the plurality of periodic processes configured in the process group 103 are sequentially driven in a predetermined order, and that the priority of the periodic processes within the process group are changed each time the sequence of the process group is terminated. As such, the process group 103 does not itself have a priority.

In contrast to Takeuchi, the signal-handler processing task according to claim 16 has a variable priority to be changed depending on a priority of at least one signal handler registered in the queue.

In particular, claim 16 recites a priority table for recording a plurality of tasks and priorities thereof while relating them to each other, wherein the plurality of tasks includes an ordinary task and a signal-handler processing task for executing at least one signal handler, the signal-handler processing task includes a queue in which at least one signal handler to be executed is registered, the signal-handler processing task includes a variable priority to be changed depending on a priority of at least one signal handler registered in the queue, and the signal-handler processing task causes to be executed a signal handler having a highest priority

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out of the at least one signal handler registered in the queue upon the signal-handler processing task being called and executed.

In view of the above, Applicants respectfully submit that Takeuchi does not disclose the signal-handler processing task according to claim 16. As such, Applicants respectfully submit that Takeuchi fails to disclose the priority table as recited by claim 16.

Therefore, Applicants respectfully submit that the any combination of Rankin, Kling, and Takeuchi fails to disclose, suggest, or otherwise render obvious the priority table as recited by claim 16.

Additionally, claim 16 recites a priority changing section for specifying the signal handler having the highest priority out of the at least one signal handler registered in the queue by referring to contents registered by a signal-handler registering section when the signal handler registered in the queue has been changed, and changing the variable priority of the signal-handler processing task recorded in the priority table to the priority of a specified highest priority signal handler. Applicants respectfully submit that this feature of claim 16 is not disclosed, suggested, or otherwise rendered obvious by any combination of Rankin, Kling, and Takeuchi.

On page 5 of the Office Action, the Examiner states that neither Rankin nor Kling teach the priority changing section as recited by claim 16.

However, on page 5 of the Office Action, the Examiner takes the position that Col. 4, Lines 54-67 of Takeuchi teach the priority changing section, as recited by claim 16, and states on page 11 of the Office Action that "Takeuchi states that … each periodic process is associated with a signal handler. This implies that when the periodic priority process changes, the signal handler associated to this particular process changes also."

In this regard, Applicants note that the Examiner has not provided any support (i.e., the exact location in Takeuchi) for the position that "each periodic process is associated with a signal handler." Regardless, even if each of the periodic process according to Takeuchi may be

associated with a signal handler, the Examiner's position implies that that the process group 103 corresponds to the signal-handler processing task according to claim 16.

However, in contrast to Takeuchi, the signal-handler processing task according to claim 16 includes a variable priority which is changed to the priority of a specified highest priority signal handler.

In particular, claim 16 recites a priority changing section for specifying the signal handler having the highest priority out of the at least one signal handler registered in the queue by referring to contents registered by a signal-handler registering section when the signal handler registered in the queue has been changed, and <u>changing the variable priority of the signal-handler processing task recorded in the priority table</u> to the priority of a specified highest priority signal handler.

Therefore, Applicants respectfully submit that any combination of Rankin, Kling, and Takeuchi fails to disclose, suggest, or otherwise render obvious the priority changing section, as recited by claim 16.

In view of the above, Applicants respectfully submit that claim 16 is patentable over any combination of Rankin, Kling, and Takeuchi.

Further, Applicants respectfully submit that claims 18, 22, 25, 28, 31, and 32 are patentable over any combination of Rankin, Kling, and Takeuchi based at least on their dependency from claim 16.

Regarding claims 33 and 34, Applicants note that claims 33 and 34 have been amended in a manner similar to claim 16. In particular, claims 33 and 34 recite a priority table recording step of recording, in a priority table, a plurality of tasks and priorities thereof while relating them to each other, wherein the plurality of tasks includes an ordinary task and a signal-handler processing task for executing at least one signal handler, the signal-handler processing task includes a queue in which at least one signal handler to be executed is registered, the signal-

handler processing task includes a variable priority to be changed depending on a priority of at least one signal handler registered in the queue, and the signal-handler processing task causes to be executed a signal handler having a highest priority out of the at least one signal handler registered in the queue upon the signal-handler processing task being called and executed. Additionally, claims 33 and 34 recite a priority changing step of specifying the signal handler having the highest priority out of the at least one signal handler registered in the queue by referring to contents registered by a signal-handler registering step when the signal handler registered in the queue has been changed, and changing the variable priority of the signal-handler processing task recorded in the priority table to the priority of the specified highest priority signal handler. Applicants respectfully submit that any combination of Rankin, Kling, and Takeuchi fails to disclose, suggest, or otherwise render obvious the above-noted features of claims 33 and 34 for reasons similar to those discussed above with respect to claim 16. Accordingly, Applicants respectfully submit that claims 33 and 34 are patentable over any combination of Rankin, Kling, and Takeuchi.

III.   Conclusion

Therefore, Applicants respectfully submit that claims 16, 18, 22, 25, 28, and 31-34 are patentable over the prior art of record.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the present application is clearly in condition for allowance. An early notice thereof is earnestly solicited.

If, after reviewing this Amendment, the Examiner feels that there are any issues remaining which must be resolved before the application can be passed to issue, Applicants respectfully request that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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